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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 09/648,044  | 08/25/2000  | CHANDRA V. MOULI     | MIO 0054 PA         | 6800             |
| 7590  | 10/19/2004  |                      | EXAMINER            |                  |
| KILWORTH GOTTMAN HAGAN & SCHAEFF LLP<br>ONE DAYTON CENTRE SUITE 500<br>ONE SOUTH MAIN STREET<br>DAYTON, OH 45402-2023 |             |                      |                     | NADAV, ORI       |
|   |             | ART UNIT             | PAPER NUMBER        | 2811             |

DATE MAILED: 10/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

|                        |                                      |                                     |
|------------------------|--------------------------------------|-------------------------------------|
| <b>Advisory Action</b> | <b>Application No.</b><br>09/648,044 | <b>Applicant(s)</b><br>MOULI ET AL. |
|                        | <b>Examiner</b><br>ori nadav         | <b>Art Unit</b><br>2811             |

*-The MAILING DATE of this communication appears on the cover sheet with the correspondence address -*

THE REPLY FILED 05 October 2004 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

**PERIOD FOR REPLY [check either a) or b)]**

- a)  The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.
- b)  The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.  
ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1.  A Notice of Appeal was filed on \_\_\_\_\_. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2.  The proposed amendment(s) will not be entered because:
  - (a)  they raise new issues that would require further consideration and/or search (see NOTE below);
  - (b)  they raise the issue of new matter (see Note below);
  - (c)  they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
  - (d)  they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_

3.  Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.
4.  Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5.  The a) affidavit, b) exhibit, or c) request for reconsideration has been considered but does NOT place the application in condition for allowance because: See attachment.
6.  The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7.  For purposes of Appeal, the proposed amendment(s) a) will not be entered or b) will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: \_\_\_\_\_

Claim(s) objected to: \_\_\_\_\_

Claim(s) rejected: 1-14 and 45-57.

Claim(s) withdrawn from consideration: \_\_\_\_\_

8.  The drawing correction filed on \_\_\_\_\_ is a) approved or b) disapproved by the Examiner.
9.  Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_.
10.  Other: \_\_\_\_\_

**ORI NADAV  
PRIMARY EXAMINER**

***Response to Arguments***

Applicant argues that Akram does not teach the claimed invention, because Akram shows the ion concentration in the doped oxide-layer portion extends beyond the gate structure.

The examiner agrees that Akram shows the ion concentration in the doped oxide layer portion extending beyond the gate structure. However, the broad recitation of the claim does not preclude the ion concentration in the doped oxide layer portion from extending beyond the gate structure. Claim 1 recites a portion of the gate oxide layer defines a first overlap region which is beneath the gate electrode and adjacent the first leading edge and inward of the second leading edge. There is nothing in the claim recitation from preventing the first overlap region to include a portion of the oxide layer which is not located beneath the gate structure. Therefore, Akram teaches the claimed invention. Note that a recitation of a portion of the gate oxide layer defining a first overlap region which is located only beneath the gate electrode, will not permit the first overlap region to be located beyond the gate structure, and will not permit the ion concentration in the doped oxide layer portion to extend beyond the gate structure.

**Papers related to this application may be submitted to Technology center (TC) 2800 by facsimile transmission. Papers should be faxed to TC 2800 via the TC 2800 Fax center located in Crystal Plaza 4, room 4-C23. The faxing of such**

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**papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The Group 2811 Fax Center number is (703) 308-7722 and 308-7724. The Group 2811 Fax Center is to be used only for papers related to Group 2811 applications.**

Any inquiry concerning this communication or any earlier communication from the Examiner should be directed to *Examiner Nadav* whose telephone number is **(571) 272-1660**. The Examiner is in the Office generally between the hours of 7 AM to 4 PM (Eastern Standard Time) Monday through Friday.

Any inquiry of a general nature or relating to the status of this application should be directed to the **Technology Center Receptionists** whose telephone number is **308-0956**



O.N.  
October 15, 2004

ORI NADAV  
PRIMARY EXAMINER  
TECHNOLOGY CENTER 2800